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			EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/675,363

Applicant(s)

COLIN ET AL.

Examiner

Wutchung Chu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/30/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to because figure 1 box 100; figure 2 box 200, 205, 210, 220, 250, and 255; figure 3 box 300; figure 4 box 310; figure 5 box 320; figure 6 box 330; figure 7 box 340; and figure 8 box 440 are not labeled. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy

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must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 9-16 are directed to a nonstatutory subject matter because the claims are not written in terms of "computer" readable medium, stored with, embodied with or encoded with a "computer" program or computer executable instructions.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 9-16 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. "tangible storage medium" critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Regarding claims 9-16, the term "tangible storage medium" is not specified by the disclosure.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 9 line 1-2, the recitation of "A computer program, stored on a tangible storage medium, for transferring data between computer systems, the program including executable instructions that cause one or more computers to:" is vague and indefinite because it is not known the metes and bounds of the claimed invention.

Claim Rejections - 35 USC § 103

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 1-4, 6-12, 14-20, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janakiraman et al. (2004/0196785) in view of Geyer et al. (US6618357).

Regarding claims 1, Janakiraman et al. disclose congestion notification process and system (**see Janakiraman et al. paragraph 8 line 1-3**) comprising the steps of:

- (a) transmitting data packages from a plurality of data sources (**see Janakiraman et al. paragraph 22 terminal clients and servers**) in a first computer network to a first gateway (**see Janakiraman et al. paragraph 22 line 3 figure node and figure 1 box 102**);
- (b) transmitting the data packages from the first gateway to a second gateway (**see Janakiraman et al. paragraph 23**);
- (c) transmitting the data packages from the second gateway to a plurality of data destinations in a second computer network (**see Janakiraman et al. paragraph 22 line 3 figure node and figure 1 box 102 and line 15-16 the second node is identical to the first node**);
- (d) transmitting acknowledgement messages from the data destinations to the second gateway (**see Janakiraman et al. paragraph 28 line 1-5 and figure 4 box 502 and 504**);

Regarding claim 1, Janakiraman et al. disclose all the subject matter of the claimed invention with the exception of (e) generating pause messages at the second gateway based at least in part on the reception of acknowledgement messages by the

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second gateway; and (f) transmitting the pause messages from the second gateway to the first gateway.

Geyer et al. from the same or similar fields of endeavor teaches the use of generating a pause frame which may be directed back upstream to the identified source stations **(see Geyer et al. column 5 line 8-11)**.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the generating a pause frame which may be directed back upstream to the identified source stations as taught by Geyer et al. in the congestion notification process and system of Janakiraman et al. in order to provide a efficient and reliable system that all the data transmitted was properly received.

Note: the phrase "capable of" of "adapted to" recited in claim 2 line 2 do not positively support claim limitations, therefore, the limitation after these phrases will not be considered as claimed limitations. However, the cited reference teaches the limitations (see rejection).

Regarding claim 2, Janakiraman et al. teaches the first gateway includes a mailbox **(see Janakiraman et al. paragraph 28 packet is buffered)** and an output task **(see Janakiraman et al. paragraph 28 flag)**, the data packages are transmitted to the mailbox **(see Janakiraman et al. paragraph 28 packet is buffered)** in step (a), and the output task is capable of retrieving data packages stored in the mailbox **(see Janakiraman et al. paragraph 28 after initializing the flag, the data packet is sent to the receiver)**.

Regarding claim 3, Janakiraman et al. disclose all the subject matter of the claimed invention with the exception of transmitting the pause messages from the first gateway to the plurality of data sources.

Geyer et al. from the same or similar fields of endeavor teaches the use of generating a pause frame which may be directed back upstream to the identified source stations **(see Geyer et al. column 5 line 8-11)**.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the generating a pause frame which may be directed back upstream to the identified source stations as taught by Geyer et al. in the congestion notification process and system of Janakiraman et al. in order to provide a efficient and reliable system that all the data transmitted was properly received.

Regarding claim 4, Janakiraman et al. teaches step (a) is performed by a plurality of sending tasks created by the data sources **(see Janakiraman et al. paragraph 22 terminal clients and servers and paragraph 23 corresponds to a plurality of sending tasks)**.

Regarding claim 6, Janakiraman et al. teaches the first gateway includes an input task and an output task, the second gateway includes an input task and an output task **(see Janakiraman et al. figure 1 box 102 corresponds to first gateway box 104 corresponds to second gateway)**, step (b) is performed by the output task of the first gateway **(see Janakiraman et al. paragraph 23)**,

Regarding claim 6, Janakiraman et al. disclose all the subject matter of the claimed invention with the exception steps (c) and (e) are performed by the input task of the second gateway, and step (f) comprises transmitting the pause messages from the output task of the second gateway to the input task of the first gateway.

Geyer et al. from the same or similar fields of endeavor teaches the use of generating a pause frame which may be directed back upstream to the identified source stations **(see Geyer et al. column 5 line 8-11 and it is obvious that gateway to have input and output tasks since it includes input ports and output ports in column 4 line 53-55).**

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the generating a pause frame which may be directed back upstream to the identified source stations as taught by Geyer et al. in the congestion notification process and system of Janakiraman et al. in order to provide a efficient and reliable system that all the data transmitted was properly received.

Regarding claim 7, Janakiraman et al. teaches further comprising the steps of: (g) transmitting acknowledgement messages from the first gateway to the data sources **(see Janakiraman et al. paragraph 26 line 1-12).**; and (h) counting the acknowledgement messages received at each data source **(see Janakiraman et al. paragraph 28 line 5-12).**

Regarding claim 8, Janakiraman et al. teaches further comprising the steps of: (g) sending messages with data package transfer information from the data sources to the first gateway **(see Janakiraman et al. paragraph 22 line 25 clients and**

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paragraph 22 line 1 first node); (h) sending a message with the data package transfer information from the first gateway to the second gateway (**see Janakiraman et al. paragraph 22 line 1-3 first node and second node**); (i) sending messages with the data package transfer information from the second gateway to the data destinations (**see Janakiraman et al. paragraph 22 line 25 servers**); and (j) checking the data package transfer information at the data destinations (**see Janakiraman et al. paragraph 23 and 24 line 1-6**).

Note: the phrase "capable of" or "adapted to" recited in claim 10 line 2 and claim 18 line 2 do not positively support claim limitations, therefore, the limitation after these phrases will not be considered as claimed limitations. However, the cited reference teaches the limitations (see rejection).

Regarding claims 9-12, and 14-16, Janakiraman et al. teaches a software implementation of congestion notification (**see Janakiraman et al. paragraph 24 line 12**) and disclose all the limitations as discussed in the rejection of claims 1-4, and 6-8 and are therefore apparatus claims 9-12, and 14-16 are rejected using the same rationales.

Regarding claims 17-20, and 22-24, Janakiraman et al. teaches congestion notification process for use in a communication network system (**see Janakiraman et al. paragraph 8 and paragraph 1**) and disclose all the limitations as discussed in the rejection of claims 1-4, and 6-8 and are therefore apparatus claims 17, 18, 20, and 22 are rejected using the same rationales.

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11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 5, 13, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janakiraman et al. and Geyer et al. as applied to claims 1-4, 6-12, 14-20, and 22-24 above, and further in view of Lindhorst-ko et al. (US2002/0075873).

Regarding claims 5, 13, and 21, Janakiraman et al. and Geyer et al. disclose all the subject matter of the claimed invention with the exception (g) adding sequence identifiers to the data packages in step (a); (h) checking the sequence identifiers added in step (g) at the first gateway; (i) adding sequence identifiers to the data packages in step (c); and (j) checking the sequence identifiers added in step (i) at the data destinations.

Lindhorst-ko et al. from the same or similar fields of endeavor teaches the use of tagging data packets with a sequence number, and reconstructing the traffic from the received data packet (see Lindhorst-ko et al. paragraph 35 and 36).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the tagging data packets with a sequence number, and reconstructing the traffic from the received data packet as taught by Lindhorst-ko et al. in the modified congestion notification process and system of Janakiraman et al. and Geyer et al in order to provide a greater protection and more efficient system.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ben-Yehezkel et al. (US2002/0165973) discloses adaptive transport protocol.

Mostafa (US2002/0073205) discloses communication service

Taguchu et al. (US2004/0024808) discloses wide area storage localization system.

Souder et al. (US6889231) discloses asynchronous information sharing system.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wutchung Chu whose telephone number is 571 270 1411. The examiner can normally be reached on Monday - Friday 1000 - 1500EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571 272 7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WC
Wutchung Chu


5/23/07
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SUPERVISORY PATENT EXAMINER